In the Claims:

Kindly substitute the following for pending Claim 1.

1. (Twice Amended) An antenna for communication with an equatorial satellite constellation, the antenna being for use on a commercial satellite terminal, comprising:

a generally circular rotating plate for mechanically scanning for wave signals in the azimuth direction;

a plurality of radiation elements positioned on said circular plate for electronically scanning for wave signals in elevation; and

a multiplexor associated with each of said plurality of radiation elements for consolidating the individual wave signals received at each of said plurality of radiation elements to an analog bit stream;

an analog to digital converter for converting said analog bit stream to a digital bit stream;

circuitry for forming multiple digital beams from said digital bit stream; and

a digital receiver for converting said digital beams into an information signal;

wherein the antenna is able to lock onto a second equatorial satellite in the constellation before locking off a first equatorial satellite.

Kindly cancel claim 6 without prejudice.

Kindly substitute the following for pending Claim 7.

7. (Twice Amended) A phased array antenna for communication with an equatorial satellite constellation, comprising:

a rotating plate for mechanically scanning for a wavefront of wave signals in an azimuth direction;

a plurality of radiation elements positioned on said rotating plate for receiving a plurality of individual waves;

apparatus for positioning said radiation elements such that a wavefront of an intended signal will be in alignment with a major axis of said plurality of radiation elements;

a multiplexer device in communication with each of said plurality of radiation elements for converting said plurality of received individual waves into an analog bit stream;

an analog to digital converter for converting said analog bit stream to a digital bit stream;

a device for forming multiple digital beams from said digital bit stream; and

a digital receiver for processing said multiple digital beams;

wherein the antenna is able to lock onto a second equatorial satellite in the constellation before locking off a first equatorial satellite.

Kindly substitute the following for pending Claim 13.

13. (Amended) A method for forming multiple beams at a commercial satellite antenna comprising:

providing a plurality of radiation elements on a surface of said commercial satellite antenna for receiving a plurality of individual wave signals;

rotating said plurality of radiation elements such that a wavefront of said plurality of individual wave signals is in alignment with a major axis of said plurality of radiation elements;

consolidating said plurality of wave signals into a single analog signal;

forming multiple beams from said single analog signal; and

transmitting said multiple beams to a plurality of satellites in an equatorial satellite constellation;

whereby the antenna is able to lock onto a second equatorial satellite in the constellation before locking off a first equatorial satellite.

Kindly substitute the following for pending Claim 14.

14. (Amended) The method of claim 13, further comprising:

converting said single analog signal to a digital bit stream; and

forming multiple digital beams from said digital bit stream.

Kindly substitute the following for pending Claim 15.

C3 concl.

15 (Amended) The method of claim 14, further comprising:

utilizing FFT techniques to form said multiple digital beams to provide for satellite retrodirectivity.

Kindly substitute the following for pending Claim 16.

16. (Amended) The method of claim 14, further comprising:

processing said multiple digital beams prior to transmitting.

Kindly substitute the following for pending Claim 21.

21. (Amended) A phased array antenna for communication with an equatorial satellite constellation, comprising:

C4 Sub D4

a rotating plate for electronically scanning for a wavefront of wave signals in elevation and for mechanically scanning for said wavefront of wave signals in an azimuth direction;

a plurality of elongated radiation elements positioned on said rotating plate for receiving a plurality of individual waves, each of said plurality of radiation elements having a major axis and a minor axis;

apparatus associated with each of said plurality of radiation elements for consolidating the wave signals received at each of said plurality of radiation elements into a first bit stream; and

a multiple beam former for forming multiple beams from said first bit stream.

Kindly substitute the following for pending Claim 30.

30. (Amended) A method of communicating with an equatorial satellite constellation, comprising:

C5 Sub D6

providing a plurality of generally parallel radiation elements on a surface of a commercial satellite antenna;

rotating said satellite antenna such that a wavefront of a plurality of individual wave signals is in alignment with a major axis of said plurality of radiation elements;

consolidating said plurality of wave signals into a single bit stream;

forming multiple beams from said single bit stream; and

transmitting said multiple beams to a plurality of satellites in the equatorial satellite constellation.

Kindly substitute the following for pending Claim 37.

37. (Amended) A commercial satellite terminal for communication with an equatorial satellite constellation comprising:

an antenna including,

a generally circular rotating plate for mechanically scanning for wave signals in the azimuth direction;

a plurality of elongated radiation elements positioned generally parallel to one another on said circular plate for electronically scanning for wave signals in elevation;

a multiplexer associated with each of said plurality of radiation elements for consolidating the individual wave signals received at each of said plurality of radiation elements to a first bit stream; and

a multiple beam former for forming multiple beams from said first bit stream.